

Quarter Million PEVs by 2025

Update on deployment of Plug-in Electric Vehicles (PEVs) and Infrastructure in the Bay Area

CALIFORNIA ENERGY COMMISSION
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Overview



- Introduction to the Bay Area Air Quality Management District
- Bay Area PEV Readiness Plan
- PEVs and Infrastructure Deployment
- Questions



Bay Area Air Quality Management District (BAAQMD)



- **Established in 1955**
- **7 million population**
(~ 5.7 million vehicles)
- **9 Counties**
- **5,340 square miles**
- **Mission:** To protect and improve public health, air quality, and the global climate



Why Clean Vehicles Matter



- On-road cars and trucks account for more than:
 - 40% of Greenhouse Gases (GHG)
 - 25% of Air Pollution
- Zero-tailpipe emissions technology is key to achieving clean air



PEV Policy Landscape



- **2012:** Governor Brown issued Executive Order B-16-2012
 - **By 2025:** over 1.5 million ZEVs in California
- **California's Advanced Clean Cars Program (ZEV Rule)**
- **Bay Area 2010 Clean Air Plan (MSM A-2)**
 - **By 2020:** 10,000 ZEVs and 100,000 PHEVs
- **Bay Area PEV Plan**
 - **By 2025:** 250,000 PEVs



Credit: Brian Kimball, Kimball Stock Photography

Strategic Incentives Funding

\$55 Million in 2014



Carl Moyer Program (CMP): \$15 million

Goods Movement Program - On-Road Trucks: \$14 million



Lower Emission School Bus Program: \$ 5 million

Transportation Fund for Clean Air (TFCA): \$21 million



TOTAL: \$55 million

Bay Area PEV Readiness Plan – adopted Dec. 2013

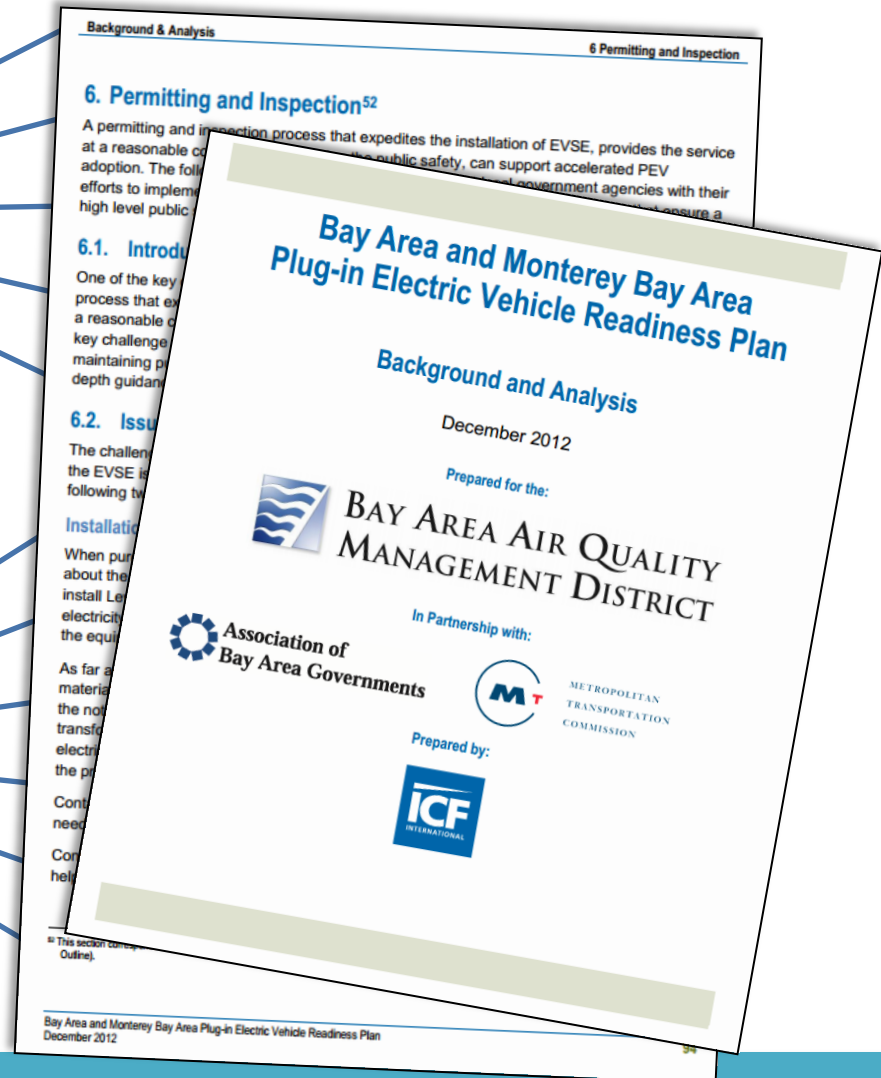
www.BayAreaPEVready.org



PEV Readiness Plan

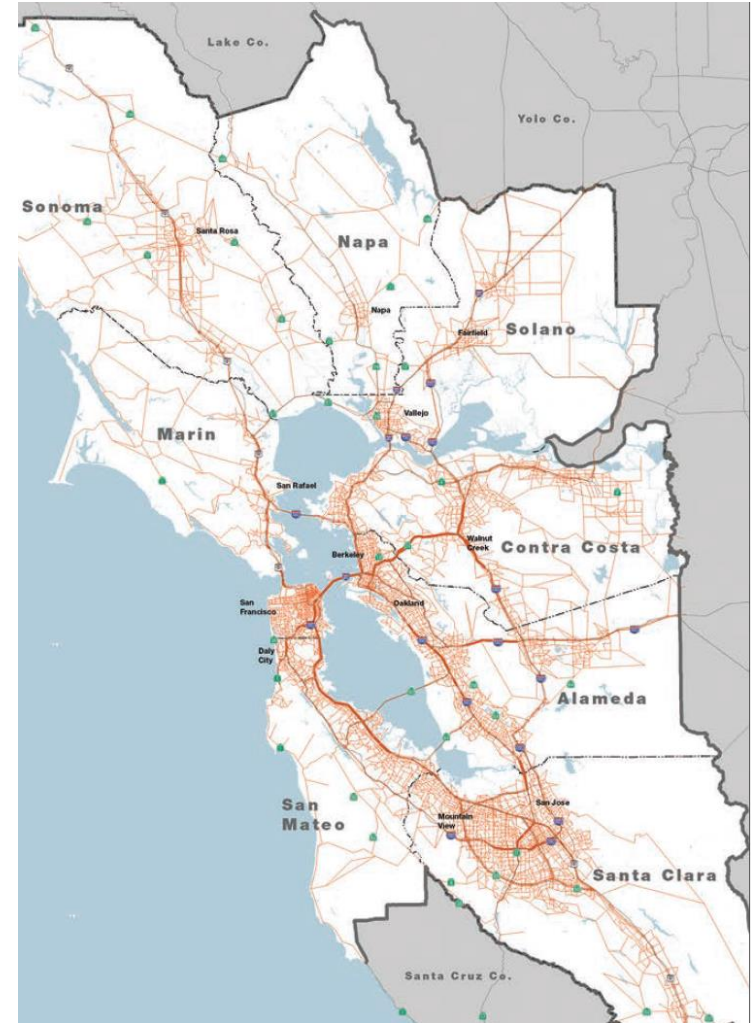
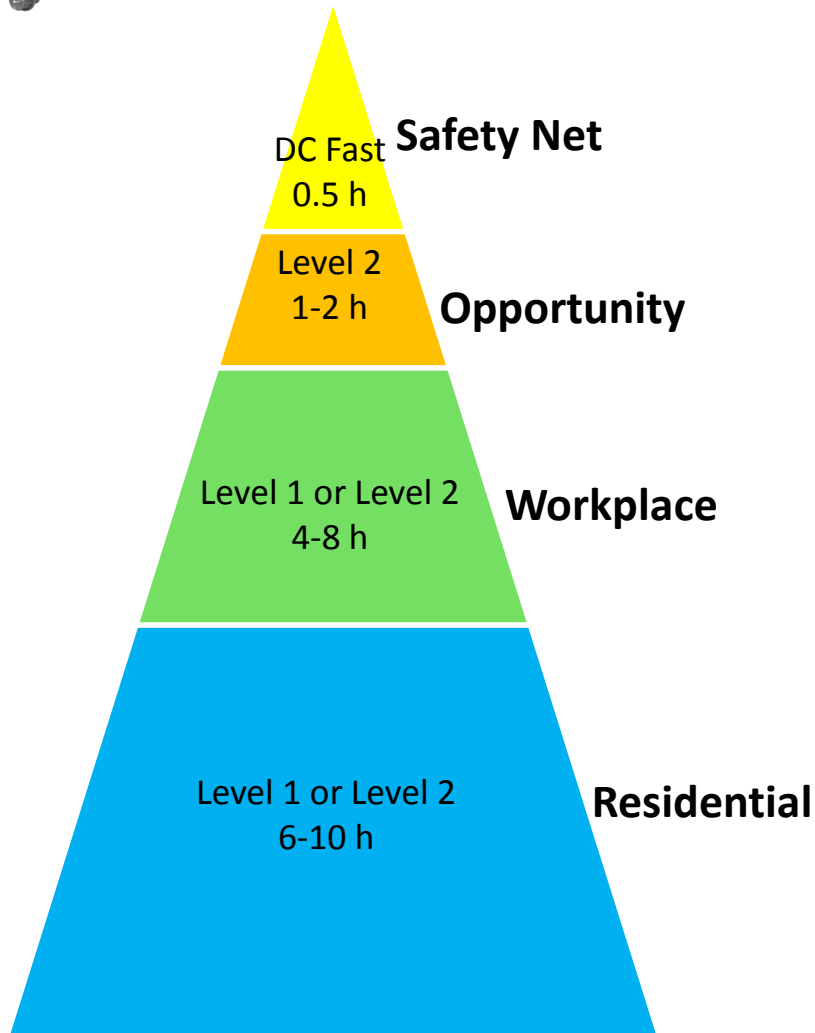
Strategies to
Accelerate
Adoption

Guidance for
PEV
Readiness



Bay Area PEV Readiness Plan

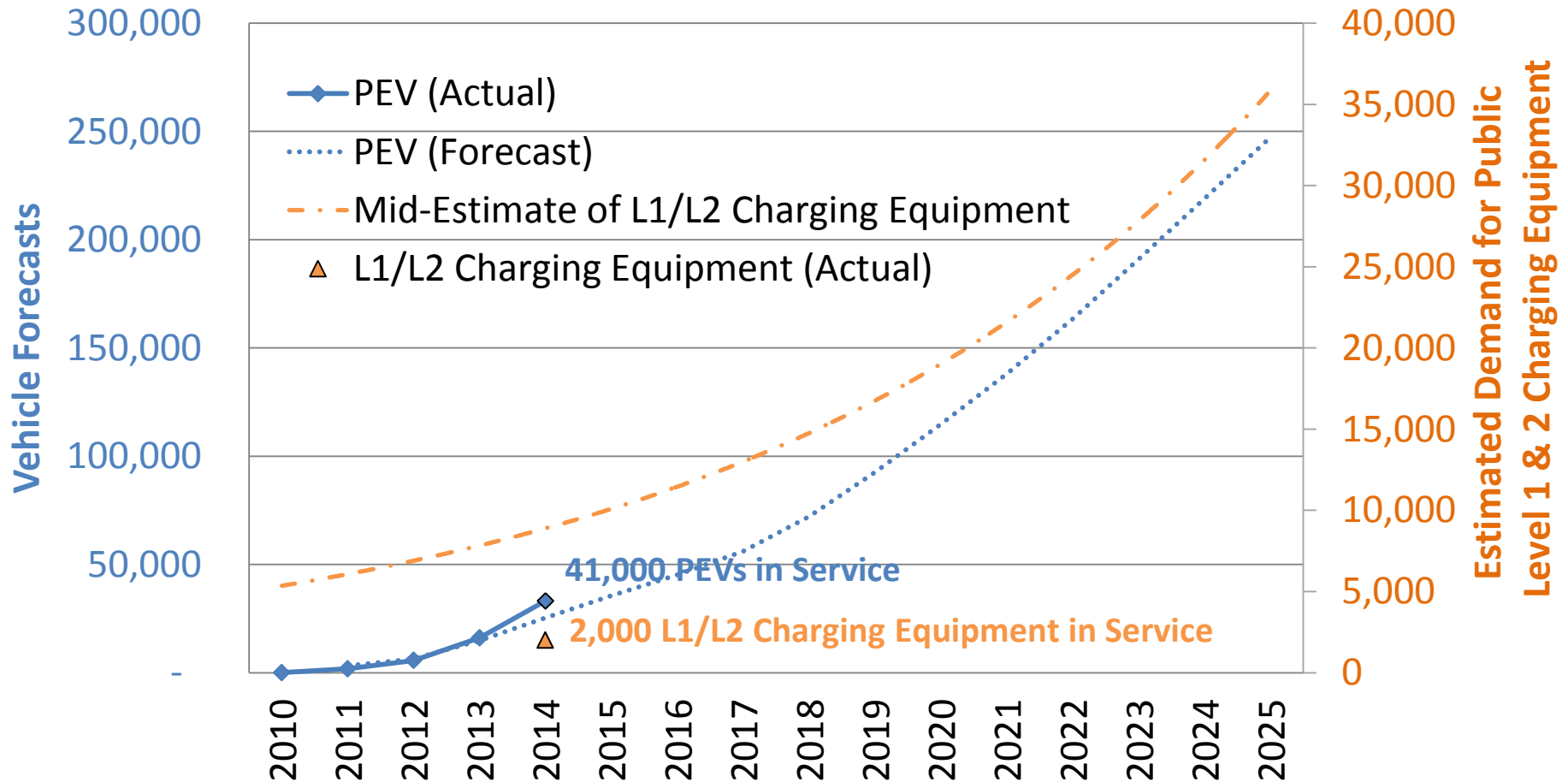
High-Public-Access vs. Home-Dominant Scenario



Bay Area PEV Readiness Plan



Public Infrastructure Estimates to Support PEV Forecasts



Estimated demand for DC Fast: 75-150 charging equipment at 35-50 locations by 2025
(Estimated 120 in service)

Community Air Risk Evaluation (CARE) Areas



- **9 identified areas** of health disparities linked to air quality
- **Prioritize grant funding** towards CARE areas
- **NRG settlement:** 20% of DC Fast to be installed in environmental justice areas



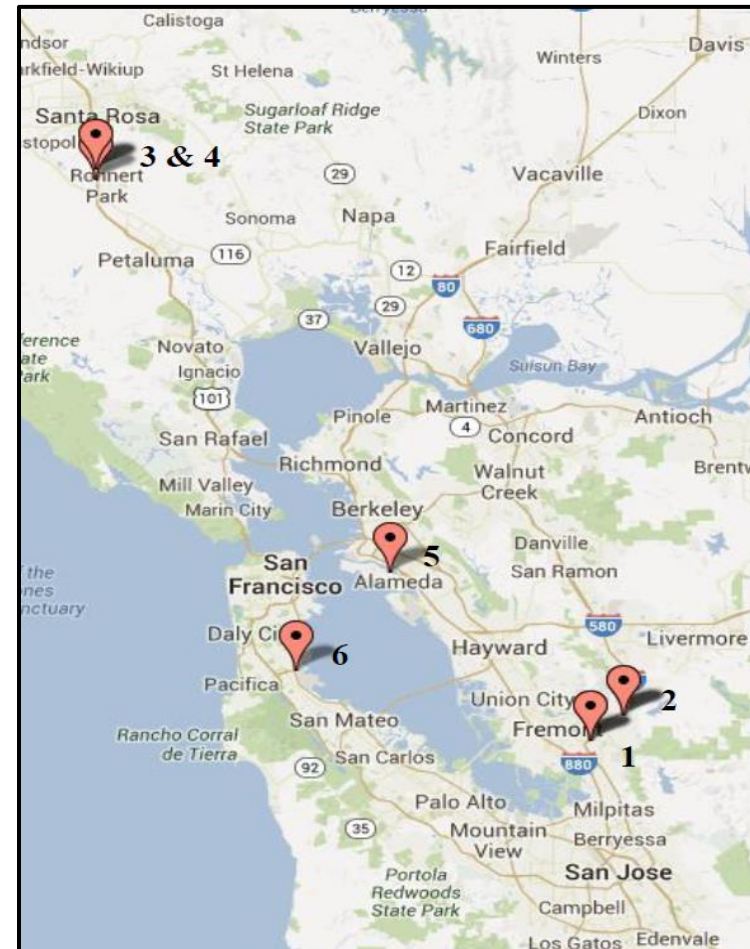
Bay Area Air District Incentives for PEVs

\$12.75 million



OPEN:

- **PEV Rebates for Public Agencies**
 - Limited to \$90,000/agency:
 - BEVs, FCHs & ZEMs \$2,500/vehicle
 - PHEVs, \$1,000
 - NEVs, \$500
- **Bay Area Corridor Charging Expansion Project** (co-sponsored by CEC)
 - **10 DC Fast & 12 Level 2 chargers at 6 locations**



Bay Area Air District Incentives for PEVs

\$12.75 million (continued)



COMING SOON:

- **PEV Fueling Infrastructure (February 2015)**
 - Level 2 (~\$2,000/charger), DC Fast (up to \$30,000/charger)
 - Corridor, workplaces, MuDs, key destinations
 - Public and private entities are eligible
 - Required minimum award of \$10,000
- **Light-Duty Vehicle (LDV) Fleet (March 2015)**
- **Heavy-Duty Vehicle (May 2015)**



Opportunities for 2015 and Beyond



MuD, Workplace/Fleet, Corridor Charging:

- Incentivize chargers at MuDs and workplaces
- Encourage Level 1 charging at applicable locations
- Support charging in priority corridors that may not have a favorable ROI
- Integrate battery storage technology and solar technologies



BAAQMD PEV Program Contacts



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Bay Area PEV Readiness Plan www.BayAreaPEVready.org